BULK
MATERIALS
HANDLING

Belt Bucket Elevator

RULA's bucket elevators are designed to reliably lift either fine (e.g. fly ash) or coarse (e.g. coal) material.

Material is fed into the boot of the elevator via an integrated inlet chute. It is important that the inlet chute is customized for the particular application, ensuring an effective and efficient feed.

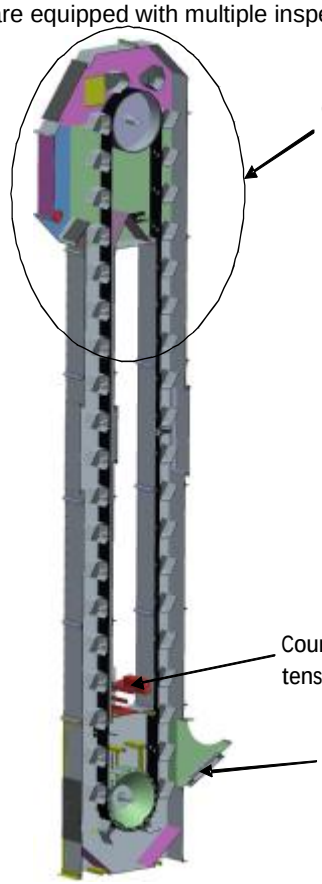
Buckets are attached to the belt by specialized elevator bolts which have a flat head, thereby minimizing interference with the head and tail end pulleys. The mechanical belt splice aligns the splicing bolts axially with the belt, ensuring a strong, reliable and flexible coupling.

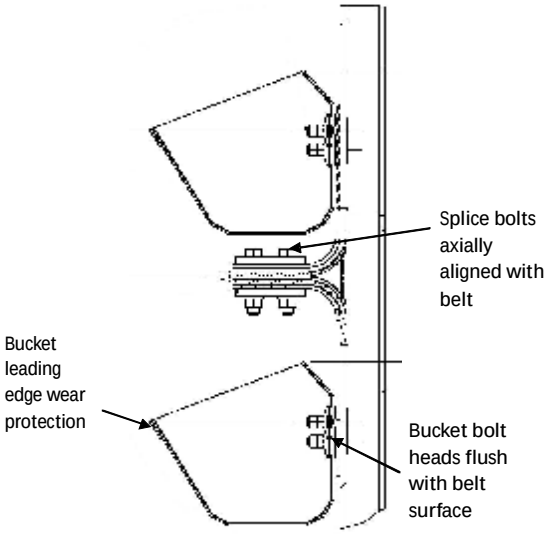
The head end housing, discharge chute and bucket profile are designed based on the elevator speed, ensuring the correct trajectory of the centrifugally discharged material. The goal is always to minimize spillage and thereby increase efficiency, while avoiding and designing around potential high-wear areas. In particular the bucket leading edges are wear protected. An adjustable throat plate in the discharge chute further helps to prevent re-entrainment of material into the elevator boot.

The head and tail end pulleys are crowned, ensuring that the belt runs true. A belt misalignment switch offers an additional protection. A boot level switch controls the feed to the elevator to prevent over-filling, while a speed sensor on the tail pulley shaft detects a snapped belt or blocked elevator.

A specially designed belt tensioner uses the mechanical advantage of a pivoted counterweight together with an adjustable threaded rod to accurately and easily set the belt tension. If additional tension is required, more weights can be added.

A key design objective is easy operability and maintainability. With this end in mind, RULA's bucket elevator are equipped with multiple inspection hatches for easy bucket replacement.





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